```
Title:
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US-10-560-433-1

Perfect score: 20 Sequence: 1 taacct acct at aagact gg 20

Scoring table: OLIGO NUC

Gapop 60.0 , Gapext 60.0

RESULT 15 AAV78686

ΙD AAV78686 standard; DNA; 305 BP.

XX AC XX DX AAV78686:

16-MAR-1999 (first entry)

Staphylococcus aureus contig SEQ ID #4375.

DE XX KW Computer readable medium vaccine: S. aureus infection: immunodetection: KW cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy; KW skin infection; surgical wound infection; scalded skin syndrome;

\$X8X5X5X5X5X5X5X5X5X575757578 toxic shock syndrome; ds.

Staphyl ococcus aureus.

EP786519- A2.

30-JUL-1997.

07- JAN- 1997: 97FP-00100117

05- JAN- 1996: 96US-0009861P.

(HUMA-) HUMAN GENOVE SCI INC.

Choi GH, Barash SC, Dillon PJ, Fannon MR, Rosen CA:

WPI: 1997-374922/35.

Polynucleotide(s) and proteins derived from Staphylococcus aureus stored on computer readable medium and used in the production of anti-S. aureus vaccines.

Claim 1; Page 2939; 3271pp; English.

This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium preferably selected from a floppy or hard disk, random access memory (FAM), read-only memory (FAM) or CO-FOM Homology searches using the Saureus DNA sequences allows putative functions to be assigned so the Scaleus Deviseduences allows put any entitle that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used for recombinant production of the polypeptides. The new DNA sequences (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer readable medium

0:

Sequence 305 BP; 86 A; 66 C; 86 G; 64 T; 0 U; 3 Other; SO

Score 20; DB 2; Pred. No. 0.024; 100.0% 100.0% Query Match Length 305: Best Local Similarity 0: Mat ches 20; Conservative M smat ches I ndel s Gaps

Qv 1 TAACCTACCTATAAGACTGG 20 76 TAACCTACCTATAAGACTGG 95 Db

BESULT 16 AAV78597

AAV78597 standard: DNA: 337 BP.

XX AAV78597;

16-MAR-1999 (first entry)

Staphylococcus aureus contig SEQ ID #4286.

Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy; skin infection; surgical wound infection; scalded skin syndrome; toxic shock syndrome; ds.

Staphyl ococcus aureus.

FP786519- A2

30- JUL- 1997.

07- JAN- 1997: 97EP-00100117.

05- JAN- 1996: 96US-0009861P.

(HUMA-) HUMAN GENOVE SCI INC.

Kunsch CA. Choi GH. Barash SC. Dillon PJ. Fannon MR. Rosen CA:

WPI: 1997-374922/35.

Polynucleotide(s) and proteins derived from Staphylococcus aureus stored on computer readable medium and used in the production of anti-S. aureus vaccines.

Claim 1; Page 2903; 3271pp; English.

This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium, prefer abily selected from a floppy or hard disk, random access memory (FAM), read-only memory (FAM) or CD-FIOM Homology searches using the Saureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of Saureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used for recombinant production of the polypeptides. The new DNA sequences

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Untitled
888
     (and their fragments) are useful as primers or probes for isolating
     homologues of any of the S. aureus DNA sequences contained on the computer
     readable medium
XX
     Sequence 337 BP; 95 A; 73 C; 93 G; 73 T; 0 U; 3 Other;
                             100.0% Score 20; DB 2; Length 337;
  Best Local Similarity
                                      Pr ed. No. 0.024;
                             100.0%
                                     0: M smat ches
             20; Conservative
  Mat ches
                                                            Indel s
                                                                              Gaps
                                                                                       0:
Qy
             1 TAACCTACCTATAAGACTGG 20
                TAACCTACCTATAAGACTGG 33
Dh
RESULT 20
AAV78473
I D
     AAV78473 standard: DNA: 400 BP.
AAV78473:
     16-MAR-1999 (first entry)
     Staphylococcus aureus contig SEQ ID #4162.
     Computer readable medium, vaccine; S. aureus infection; immunodetection;
     cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
     skin infection; surgical wound infection; scalded skin syndrome;
     toxic shock syndrome; ds.
     Staphyl ococcus aureus.
     EP786519- A2.
     30- JUL- 1997.
     07- JAN- 1997:
                      97EP-00100117.
     05- JAN- 1996:
                      96US-0009861P.
     (HUMA-) HUMAN GENOVE SCI INC.
     Kunsch CA, Choi CH, Barash SC, Dillon PJ, Fannon MR, Rosen CA;
     WPI: 1997-374922/35.
     Polynucleotide(s) and proteins derived from Staphylococcus aureus -
     stored on computer readable medium and used in the production of anti-
     S. aur eus vacci nes.
     Claim 1; Page 2851; 3271pp; English.
     This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable
     medium, preferably selected from a floppy or hard disk, random access
memory (RAM), read-only memory (ROM) or CD-ROM. Homology searches using
     the S. aureus DNA sequences allows putative functions to be assigned so
```

that profein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, Page 3

```
Untitled
888888X8
      skin and surgical wound infections, scalded skin syndrome, toxic shock
      syndrome, etc. Organisms transformed with the DNA sequences can be used
      for recombinant production of the polypeptides. The new DNA sequences
      (and their fragments) are useful as primers or probes for isolating homologues of any of the Saureus DNA sequences contained on the computer
      readable medium
      Sequence 400 BP; 119 A; 83 C; 92 G; 102 T; 0 U; 4 Other;
                               100.0%
                                        Score 20; DB 2; Lengt h 400; Pred. No. 0.024;
  Query Match
  Best Local Similarity
                               100.0%
                                       0: M smat ches
              Conservative
                                                                Indels
                                                                            0:
                                                                                 Gaps
              1 TAACCTACCTATAAGACTGG 20
Qy
           304 TAACCTACCTATAAGACTGG 323
Dh
RESULT 21
AAV77944
I D
     AAV77944 standard: DNA: 400 BP.
AAV77944:
      16-MAR-1999 (first entry)
      Staphylococcus aureus contig SEQ ID #3633.
      Computer readable medium, vaccine; S. aureus infection; immunodetection;
      cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy; skin infection; surgical wound infection; scalded skin syndrome;
      toxic shock syndrome; ds.
      Staphyl ococcus aureus.
      EP786519- A2.
      30-JUL-1997.
      07- JAN- 1997:
                       97EP-00100117.
      05- JAN- 1996:
                       96US-0009861P.
      (HUMA-) HUMAN GENOME SCL LNC.
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0:

Polynucleotide(s) and proteins derived from Staphylococcus aureus stored on computer readable medium and used in the production of anti-

S. aureus vaccines.

Kunsch CA. Choi GH.

WPI: 1997-374922/35.

Claim 1: Page 2619: 3271pp: English.

This sequence represents one of 5191 Staphyl ococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium preferably selected from a floppy or hard disk, random access medium preferably selected from a floppy or hard disk, random access menory (FAM), read-only memory (FAM) or CD-FIOM Homology searches using the Saure that profein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can

Barash SC. Dillon PJ. Fannon MR. Rosen CA:

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8888888888
      be used in a vaccine composition against S. aureus infection. The
      polypeptides can also be used in a kit for the immunodetection of
      S. aureus in a sample. S. aureus is implicated in numerous human diseases,
      including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Crganisms transformed with the DNA sequences can be used
      for recombinant production of the polypeptides. The new DNA sequences
      (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
      readable medium
      Sequence 400 BP; 120 A; 76 C; 100 G; 102 T; 0 U; 2 Other;
                                              Score 20; DB 2; Lengt h 400; Pred. No. 0.024;
  Query Match
Best Local Similarity
                                   100.0%
                                  100.0%
  Mat ches
               20; Conservative
                                           0; M smatches
                                                                   0:
                                                                                      0;
                                                                                           Gaps
                                                                                                      0:
                                                                       I ndel s
Qv
                1 TAACCTACCTATAAGACTGG 20
             210 TAACCTACCTATAAGACTGG 229
Db
RESULT 22
AAV78113/ c
      AAV78113 standard; DNA; 400 BP.
AAV78113;
      16-MAR-1999 (first entry)
      Staphylococcus aureus contig SEQ ID #3802.
      Computer readable medium vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
      skin infection; surgical wound infection; scalded skin syndrome;
      toxic shock syndrome; ds.
      Staphyl ococcus aureus.
      EP786519- A2.
      30- JUL- 1997.
      07- JAN- 1997:
                          97EP-00100117.
      05- JAN- 1996:
                          96US-0009861P.
      (HUMA-) HUMAN GENOME SCI INC.
      Kunsch CA. Choi GH. Barash SC. Dillon PJ. Fannon MR. Bosen CA:
      WPI; 1997-374922/35.
      Polynucleotide(s) and proteins derived from Staphyl ococcus aureus -
      stored on computer readable medium and used in the production of anti-
      S. aureus vaccines.
      Claim 1; Page 2695; 3271pp; English.
      This sequence represents one of 5191 Staphylococcus aureus DNA sequences
      of the invention. The DNA sequences are recorded on a computer readable of the invention. The DNA sequences are recorded on a computer readable memory (FAM), read-only memory (FAM), or DNA DNA bear ches using
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Page 5

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x8888888888888
     the S. aureus DNA sequences allows putative functions to be assigned so
     that protein-encoding or regulatory regions of commercial, therapeutic or
     industrial importance can be obtained. Specifically, sequences which are
     likely to encode antigens have been identified and these polypeptides can
     be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of
     S. aureus in a sample. S. aureus is implicated in numerous human diseases,
     including cellulitis, eyelid infections, food poisoning, osteomyelitis,
     skin and surgical wound infections, scalded skin syndrome, toxic shock
     syndrome, etc. Organisms transformed with the DNA sequences can be used
     for recombinant production of the polypeptides. The new DNA sequences
     (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
     readable medium
     Sequence 400 BP; 106 A; 84 C; 61 G; 147 T; 0 U; 2 Other;
                             100.0% Score 20; DB 2; 100.0% Pred. No. 0.024;
  Query Match
                                                           Lenath 400:
  Best Local Similarity
                                    0: M smat ches
                                                         0:
  Mat ches
             20; Conservative
                                                            Indels
                                                                        0;
                                                                             Gaps
                                                                                      0:
Qy
             1 TAACCTACCTATAAGACTGG 20
            86 TAACCTACCTATAAGACTGG 67
Dh
RESULT 23
AAV77861
ΙD
     AAV77861 standard: DNA: 400 BP.
AAV77861:
     16-MAR-1999 (first entry)
     Staphylococcus aureus contig SEQ ID #3550.
     Computer readable medium, vaccine; S. aureus infection; immunodetection;
     cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
     skin infection; surgical wound infection; scalded skin syndrome;
     toxic shock syndrome; ds.
     Staphyl ococcus aureus.
     EP786519- A2.
     30- JUL- 1997.
     07- JAN- 1997:
                      97EP-00100117.
     05- JAN- 1996:
                      96US-0009861P.
     (HUMA-) HUMAN GENOME SCI INC.
     Kunsch CA. Choi GH. Barash SC. Dillon PJ. Fannon MR. Rosen CA:
     WPI: 1997-374922/35.
     Polynucleotide(s) and proteins derived from Staphylococcus aureus -
     stored on computer readable medium and used in the production of anti-
     S. aur eus vacci nes.
     Claim 1: Page 2580: 3271pp: English.
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This sequence represents one of 5191 Staphylococcus aureus DNA sequences
       of the invention. The DNA sequences are recorded on a computer readable
       medium, prefer ably selected from a floppy or hard disk, random access
medium, prefer ably selected from a floppy or hard disk, random access
memory (FAM), read-only memory (FAM) or CD-ROM Homology searches using
the Saureus DNA sequences all ows putative functions to be assigned so
       the Sauleus of Sequences allows put any verbillations to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can
       be used in a vaccine composition against S. aureus infection. The
       polypeptides can also be used in a kit for the immunodetection of
       S. aureus in a sample. S. aureus is implicated in numerous human diseases,
       including cellulitis, eyelid infections, food poisoning, osteomyelitis,
       skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used
       for recombinant production of the polypeptides. The new DNA sequences
       (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
       readable medium
       Sequence 400 BP; 112 A; 85 C; 118 G; 85 T; 0 U; 0 Other;
  Query Match
Best Local Similarity
                                     100.0%
                                                Score 20; DB 2;
Pred. No. 0.024;
                                                                          Length 400;
                                     100.0%
                                               0: M smatches
                                                                        0:
  Mat ches
                 Conservative
                                                                            Indel s
                                                                                            0;
                                                                                                  Gaps
                                                                                                              0:
Qy
                 1 TAACCTACCTATAAGACTGG 20
               61 TAACCTACCTATAAGACTGG 80
Db
RESULT 24
AAV78139/ c
       AAV78139 standard; DNA; 400 BP.
AAV78139;
       16-MAR-1999 (first entry)
       Staphylococcus aureus contig SEQ ID #3828.
       Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
       skin infection; surgical wound infection; scalded skin syndrome;
       toxic shock syndrome; ds.
       Staphyl ococcus aureus.
       EP786519- A2.
       30- JUL- 1997.
       07- JAN- 1997;
                            97EP-00100117.
       05- JAN- 1996:
                            96US-0009861P.
       (HUMA-) HUMAN GENOVE SCI INC.
       Kunsch CA, Choi CH, Barash SC, Dillon PJ, Fannon MR, Rosen CA;
       WPI: 1997-374922/35.
       Polynucleotide(s) and proteins derived from Staphylococcus aureus -
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PT
       S. aureus vaccines.
X8X88888888888888888888
       Claim 1: Page 2706: 3271pp: English.
       This sequence represents one of 5191 Staphyl ococcus aureus DNA sequences
       of the invention. The DNA sequences are recorded on a computer readable
      medium preferably selected from a floppy or hard disk, random access memory (FAM), read-only memory (FAM) or CD-ROM Homology searches using the Saureus DNA sequences allows putative functions to be assigned so
      that protein-encoding or regulatory regions of commercial, therapeutic or
industrial importance can be obtained. Specifically, sequences which are
       likely to encode antigens have been identified and these polypeptides can
      be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases,
      including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock
       syndrome, etc. Organisms transformed with the DNA sequences can be used
       for recombinant production of the polypeptides. The new DNA sequences
       (and their fragments) are useful as primers or probes for isolating homologues of any of the S. aureus DNA sequences contained on the computer
       readable medium
       Sequence 400 BP; 101 A; 102 C; 78 G; 117 T; 0 U; 2 Other;
                                   100.0%; Score 20; DB 2; Length 400;
   Query Match
   Best Local Similarity
                                   100.0%
                                             Pred. No. 0.024;
   Mat ches
                20: Conservative
                                            0; M smatches
                                                                    0:
                                                                        Indels
                                                                                       0:
                                                                                            Gaps
Q
                1 TAACCTACCTATAAGACTGG 20
             208 TAACCTACCTATAAGACTGG 189
Db
RESULT 25
AAV78005/ c
       AAV78005 standard; DNA; 400 BP.
I D
XX
AAV78005;
       16-MAR-1999 (first entry)
       Staphylococcus aureus contig SEQ ID #3694.
       Computer readable medium, vaccine; S. aureus infection; immunodetection;
       cellulitis: evelid infection: food poisoning: osteonvelitis: therapy:
       skin infection; surgical wound infection; scalded skin syndrome;
KKX8XFXPXFXFXFXFX
       toxic shock syndrome; ds.
       Staphyl ococcus aureus.
       EP786519- A2.
       30- JUL- 1997.
       07- JAN- 1997;
                          97FP-00100117.
       05- JAN- 1996:
                          96US-0009861P.
      (HUMA-) HUMAN GENOVE SCI INC.
       Kunsch CA. Choi CH. Barash SC. Dillon PJ. Fannon MR. Rosen CA:
XX
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0:

Page 8

WPI; 1997-374922/35.

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XX
PT
      Polynucleotide(s) and proteins derived from Staphylococcus aureus -
stored on computer readable medium and used in the production of anti-
      S. aur eus vacci nes.
      Claim 1; Page 2647; 3271pp; English.
      This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable
      medium preferably selected from a floppy or hard disk, random access memory (FAM), read-only memory (FAM) or CO-FOM Homology searches using the Saureus DNA sequences allows putative functions to be assigned so
      that profein-encoding or regulatory regions of commercial, the apeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can
      be used in a vaccine composition against S. aureus infection. The
      polypeptides can also be used in a kit for the immunodetection of
      S. aureus in a sample. S. aureus is implicated in numerous human diseases,
      including cellulitis, eyelid infections, food poisoning, osteomyelitis,
      skin and surgical wound infections, scalded skin syndrome, toxic shock
      syndrome, etc. Organisms transformed with the DNA sequences can be used
      for recombinant production of the polypeptides. The new DNA sequences (and their fragments) are useful as primers or probes for isolating
      homologues of any of the S. aureus DNA sequences contained on the computer
      readable medium
      Sequence 400 BP; 102 A; 94 C; 77 G; 126 T; 0 U; 1 Other;
                                 100.0%
                                           Score 20; DB 2;
Pred. No. 0.024;
  Query Match
                                                                 Length 400:
  Best Local Similarity
                                100.0%
                                         0;
  Mat ches
               20: Conservative
                                             M smat ches
                                                                     Indels
                                                                                 0:
                                                                                       Gaps
                                                                                                 0:
Qy
               1 TAACCTACCTATAAGACTGG 20
                 TAACCTACCTATAAGACTGG 147
RESULT 26
AAV77900
      AAV77900 standard; DNA; 400 BP.
AAV77900:
      16-MAR-1999 (first entry)
      Staphylococcus aureus contig SEQ ID #3589.
ĸw
      Computer readable medium vaccine: S. aureus infection: immunodetection:
KW
      cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;
      skin infection; surgical wound infection; scalded skin syndrome;
KW
toxic shock syndrome; ds.
      Staphyl ococcus aureus.
                          Location/Qualifiers
                          241. . 300
      misc feature
                          / * t ag=
                          /note= "these bases represent a line of missing text in
                          the sequence listing in the specification. They are
                          included to maintain the nucleotide numbering given in
                          the specification for this DNA sequence"
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EP786519- A2.

30- JUL- 1997.

XX

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07- JAN- 1997:
                                                      97FP-00100117.
              05- JAN- 1996:
                                                      96US-0009861P.
             (HUMA-) HUMAN GENOVE SCI INC.
              Kunsch CA, Choi CH, Barash SC, Dillon PJ, Fannon MR, Rosen CA;
             WPI: 1997-374922/35.
              Polynucleotide(s) and proteins derived from Staphylococcus aureus -
              stored on computer readable medium and used in the production of anti-
              S. aureus vaccines.
              Claim 1; Page 2599-2600; 3271pp; English.
             This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable
             or the invention. The LWA sequences are recorded on a computer readable medium preferably selected from a floppy or hard disk, random access memory (FRMM, read-only memory (FRMM) or CD-FRMM Homology searches using the S. aureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be useful to execute the search of the second of the se
              be used in a vaccine composition against S. aureus infection. The
              polypeptides can also be used in a kit for the immunodetection of
              S. aureus in a sample. S. aureus is implicated in numerous human diseases,
              including cellulitis, eyelid infections, food poisoning, osteomyelitis,
              skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used
             for recombinant production of the polypeptides. The new DNA sequences (and their fragments) are useful as primers or probes for isolating homologues of any of the Saureus DNA sequences contained on the computer
              readable medium
              Sequence 400 BP; 99 A; 67 C; 97 G; 75 T; 0 U; 62 Other;
                                                                                             Score 20; DB 2;
Pred. No. 0.024;
     Query Match
Best Local Similarity
                                                                        100.0%
                                                                                                                                              Length 400:
                                                                        100.0%
                                                                                          0: M smat ches
                                                                                                                                          0;
     Mat ches
                                20; Conservative
                                                                                                                                                                                              Gaps
                                                                                                                                                   Indel s
                                                                                                                                                                                 0;
                                                                                                                                                                                                                    0;
Qv
                                 1 TAACCTACCTATAAGACTGG 20
                              65 TAACCTACCTATAAGACTGG 84
Db
RESULT 28
AAV75946/ c
             AAV75946 standard: DNA: 579 BP.
XX
AC
XX
DX
             AAV75946:
              16-MAR-1999 (first entry)
DE
              Staphylococcus aureus contig SEQ ID #1635.
```

Page 10

Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy;

skin infection; surgical wound infection; scalded skin syndrome;

ΧX KW

KW KW

KW

XX

toxic shock syndrome: ds.

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Untitled
œ
       Staphyl ococcus aureus.
EP786519- A2.
       30- JUL- 1997.
       07- JAN- 1997:
                            97FP-00100117
       05- JAN- 1996:
                             96US-0009861P.
       (HUMA-) HUMAN GENOME SCI INC.
       Kunsch CA. Choi GH. Barash SC. Dillon P.J. Fannon MB. Bosen CA:
       WPI: 1997-374922/35.
       Polynucleotide(s) and proteins derived from Staphylococcus aureus -
       stored on computer readable medium and used in the production of anti-
       S. aureus vacci nes.
       Claim 1; Page 2018; 3271pp; English.
       This sequence represents one of 5191 Staphylococcus aureus DNA sequences
       of the invention. The DNA sequences are recorded on a computer readable
       medium, preferably selected from a floppy or hard disk, random access memory (FAM), read-only memory (FAM) or CD-ROM Homology searches using the Saureus DNA sequences allows putative functions to be assigned so
       that protein-encoding or regulatory regions of commercial, therapeutic or
       industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against Saureus infection. The
       be used in a vaccine composition against 5 an easimection ine-
polypeptides can also be used in a kit for the immunodetection of
Saureus in a sample. Saureus is implicated in numerous human diseases,
including cellulitis, eyelid infections, food poisoning, osteomyelitis,
skin and surgical wound infections, scalded skin syndrome, toxic shock
       syndrome, etc. Organisms transformed with the DNA sequences can be used
       for recombinant production of the polypeptides. The new DNA sequences
       (and their fragments) are useful as primers or probes for isolating homologues of any of the Saureus DNA sequences contained on the computer
       readable medium
       Sequence 579 BP; 159 A; 120 C; 87 G; 208 T; 0 U; 5 Other;
                                                  Score 20; DB 2;
Pred. No. 0.024;
   Query Match
                                      100.0%
                                                                  DB 2; Length 579;
   Best Local Similarity
                                      100.0%
  Mat ches
                 20: Conservative
                                               0: M smat ches
                                                                          0:
                                                                              Indels
                                                                                              0:
                                                                                                    Gaps
                                                                                                                0:
Qy
                 1 TAACCTACCTATAAGACTGG 20
              145 TAACCTACCTATAAGACTGG 126
Db
RESULT 29
AAV77941
       AAV77941 standard; DNA; 589 BP.
XX
AC
       AAV77941:
XXDXXE
       16-MAR-1999 (first entry)
       Staphylococcus aureus contig SEQ ID #3630.
XX
```

Computer readable medium vaccine; S. aureus infection; immunodetection; Page 11

```
KW
       cellulitis; evelid infection; food poisoning; osteomyelitis; therapy;
KW
       skin infection; surgical wound infection; scalded skin syndrome;
KW
       toxic shock syndrome; ds.
Staphyl ococcus aureus.
       FP786519- A2
       30- JUL- 1997.
       07- JAN- 1997:
                            97EP-00100117.
       05-JAN-1996:
                            96US-0009861P.
       (HUMA-) HUMAN GENOME SCI INC.
       Kunsch CA.
                      Choi GH. Barash SC. Dillon PJ. Fannon MR.
       WPI: 1997-374922/35.
       Polynucleotide(s) and proteins derived from Staphylococcus aureus -
       stored on computer readable medium and used in the production of anti-
       S. aureus vaccines.
       Claim 1; Page 2618; 3271pp; English.
       This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable
       medium preferably selected from a floppy or hard disk, random access medium preferably selected from a floppy or hard disk, random access medium preferably searches using the Saureus DNA sequences allows putative functions to be assigned so
       that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can
       be used in a vaccine composition against S. aureus infection. The
       polypeptides can also be used in a kit for the immunodetection of
       S. aureus in a sample. S. aureus is implicated in numerous human diseases,
       including cellulitis, syelid infections, food poisoning, osteonyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used
       for recombinant production of the polypeptides. The new DNA sequences
       (and their fragments) are useful as primers or probes for isolating homologues of any of the S.aureus DNA sequences contained on the computer
       readable medium
       Sequence 589 BP: 208 A: 86 C: 115 G: 175 T: 0 U: 5 Other:
                                     100.0%
                                                  Score 20; DB 2;
Pred. No. 0.024;
                                                                DB 2:
                                                                         Lengt h 589;
   Query Match
   Best Local Similarity
                                     100.0%
                                               0; M smatches
   Mat ches
                 20: Conservative
                                                                                            0:
                                                                                                              0:
                                                                              Indel s
                                                                                                  Gaps
Qv
                 1 TAACCTACCTATAAGACTGG 20
              421 TAACCTACCTATAAGACTGG 440
Dh
RESULT 31
AAV77850
ΙD
       AAV77850 standard; DNA; 1171 BP.
XX
AC
XX
DT
       AAV77850:
       16-MAR-1999 (first entry)
```

Qv

Staphyl ococcus aureus contig SEQ ID #3539.

Computer readable medium, vaccine; S. aureus infection; immunodetection; cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy; skin infection; surgical wound infection; scalded skin syndrome; toxic shock syndrome; ds.

Staphyl ococcus aureus.

Key Location/Qualifiers misc_feature 661. .720

/note="these bases represent a line of missing text in the sequence listing in the specification. They are included to maintain the nucleotide numbering given in the specification for this DNA sequence"

EP786519- A2.

30- JUL- 1997.

07- JAN- 1997: 97EP- 00100117.

05- JAN- 1996; 96US- 0009861P.

(HUMA-) HUMAN GENOME SCI INC.

Kunsch CA, Choi CH, Barash SC, Dillon PJ, Fannon MR. Rosen CA:

WPI: 1997-374922/35.

Polynucleotide(s) and proteins derived from Staphylococcus aureus stored on computer readable medium and used in the production of anti-S.aureus vaccines.

Claim 1; Page 2574-2575; 3271pp; English.

This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium preferably selected from a floppy or hard disk, random access memory (FAM, read-only memory (FAM), read-only only one of the properties of the prope

0:

Q Sequence 1171 BP; 288 A; 241 C; 282 C; 300 T; 0 U; 60 Other;

Query Match 100.0% Score 20; DB 2; Length 1171; Best Local Similarity 100.0% Pred. No. 0.023; Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps

1 TAACCTACCTATAAGACTGG 20

1121 TAACCTACCTATAAGACTGG 1140 Db

```
RESULT 32
AAV77505
```

ŔŴ

I D AAV77505 standard; DNA; 1290 BP.

XX AC AAV77505:

16-MAR-1999 (first entry)

XX DT XX DE XX Staphylococcus aureus contig SEQ ID #3194.

Computer readable medium, vaccine; S. aureus infection; immunodetection; KW cellulitis; eyelid infection; food poisoning; osteomyelitis; therapy; skin infection; surgical wound infection; scalded skin syndrome; toxic shock syndrome; ds.

Staphyl ococcus aureus.

Key Location/Qualifiers

901. . 960 misc feature

/*tag= a /note= "these bases represent a line of missing text in the sequence listing in the specification. They are included to maintain the nucleotide numbering given in the specification for this DNA sequence"

EP786519- A2.

30- JUL- 1997.

07- JAN- 1997: 97EP-00100117.

05- JAN- 1996; 96US-0009861P.

(HUMA-) HUMAN ŒNOME SCI INC.

Kunsch CA. Choi GH. Barash SC. Dillon PJ. Fannon MR. Rosen CA:

WPI: 1997-374922/35.

Polynucleotide(s) and proteins derived from Staphylococcus aureus stored on computer readable medium and used in the production of anti-S. aureus vaccines.

Claim 1; Page 2479-2480; 3271pp; English.

This sequence represents one of 5191 Staphylococcus aureus DNA sequences of the invention. The DNA sequences are recorded on a computer readable medium preferably selected from a floppy or hard disk, random access medium preferably selected from a floppy or hard disk, random access medium preferably searches using the Saureus DNA sequences allows putative functions to be assigned so that protein-encoding or regulatory regions of commercial, therapeutic or industrial importance can be obtained. Specifically, sequences which are likely to encode antigens have been identified and these polypeptides can be used in a vaccine composition against S. aureus infection. The polypeptides can also be used in a kit for the immunodetection of S. aureus in a sample. S. aureus is implicated in numerous human diseases, including cellulitis, eyelid infections, food poisoning, osteomyelitis, skin and surgical wound infections, scalded skin syndrome, toxic shock syndrome, etc. Organisms transformed with the DNA sequences can be used

Page 14

CC	for recombinant production of the polypeptides. The new DNA sequences	
888	(and their fragments) are useful as primers or probes for isolating	
∞	homologues of any of the S. aureus DNA sequences contained on the computer	er 💮
	readable medium	
XX		
SQ	Sequence 1290 BP; 354 A; 253 C; 340 C; 283 T; 0 U; 60 Cther;	
Ğ	ery Match 100.0%, Score 20; DB 2; Length 1290;	
	st Local Similarity 100.0%, Pred. No. 0.023;	_
Ma	ches 20; Conservative 0; Mismatches 0; Indels 0; Gaps	0;
0.	4 TAACCTACCTATAACACTCC 00	
Qу	1 TAACCTACCTATAAGACTGG 20	